

**Appendix 2:** Proteins present in commercially available vaccines from five different manufacturers (A-E)

Note: Higher ln(NSAF) values indicate greater abundance.

Vaccine A					
Accession Number	Protein identification	Protein Length (Amino Acids)	Mean No. of peptides	Mean % Coverage	Mean ln(NSAF)
45656311	Hypothetical Protein LIC10411	157	36.00	38.67	-2.45
45658793	LipL41	355	33.33	32.67	-3.35
45657753	Flagellin Protein	282	25.00	31.00	-3.41
45656767	Hypothetical Protein LIC10876	183	13.67	22.67	-3.58
45658651	Hypothetical Protein LIC12821	146	9.67	35.67	-3.70
45657230	LipL32	272	12.00	27.00	-4.11
45655816	Hypothetical Protein LIC20240	180	7.67	13.00	-4.13
45658676	DNA-Directed RNA Polymerase Subunit Alpha	325	13.33	23.33	-4.17
45656263	Electron Transfer Flavoprotein Alpha- Subunit	319	13.00	15.00	-4.19
45658705	Elongation Factor Tu	401	15.00	29.67	-4.29
45657748	Putative Lipoprotein	412	14.33	19.33	-4.34
45657213	Chaperonin GroEL	546	18.67	31.00	-4.37
45657711	Hypothetical Protein LIC11848	276	9.33	16.67	-4.38

45656096	Peptidoglycan Associated Cytoplasmic Membrane Protein	195	6.33	23.33	-4.40
45656645	50S Ribosomal Protein L10	177	5.67	23.00	-4.44
45656449	Hypothetical Protein LIC10551	371	11.00	14.67	-4.50
45658876	Hypothetical Protein LIC13050	366	10.33	9.67	-4.55
45656891	Anti-Sigma Factor Antagonist	111	3.67	25.00	-4.57
45659065	Isocitrate Dehydrogenase	398	11.00	15.67	-4.59
45657930	Cysteine Synthase Succinyl-CoA	309	7.33	17.00	-4.72
45658411	Synthetase Beta Subunit	390	9.00	18.33	-4.75
45658458	Hypothetical Protein LIC12621	136	3.00	21.67	-4.79
45657404	Flagellin Protein	283	6.33	12.67	-4.79
45656526	Putative Lipoprotein	139	3.00	12.00	-4.81
45658599	Thiol Peroxidase	171	3.67	16.67	-4.82
45655923	Putative Lipoprotein	245	5.33	19.33	-4.83
45658702	50S Ribosomal Protein L4	211	5.00	11.67	-4.85
45656765	Molybdopterin Oxidoreductase	1035	21.00	15.33	-4.87

45656218	Hypothetical Protein LIC10314	557	11.33	9.33	-4.88
45657242	Short-Chain Dehydrogenase	261	5.33	15.00	-4.89
45655661	Hypothetical Protein LIC20078	171	3.33	9.00	-4.92
45656650	30S Ribosomal Protein S7	157	3.00	20.00	-4.93
45658988	Hypothetical Protein LIC13166	306	5.67	11.00	-4.97
45658626	Acetyl-CoA Acetyltransferase	441	7.67	22.00	-5.03
45658689	30S Ribosomal Protein S8	133	2.33	14.00	-5.04
45658886	LipL36	366	6.33	15.00	-5.04
45655684	Hypothetical Protein LIC20101	183	3.33	10.33	-5.05
45657939	Phosphoglycerate Kinase	396	6.67	13.00	-5.06
45657559	Hypothetical Protein LIC11693	166	2.67	16.00	-5.12
45656504	DNA-Binding Stress Protein	172	2.67	14.00	-5.16
45657363	Chemotaxis Protein	154	2.33	10.00	-5.18
45656033	LipL45-Like Protein	330	5.00	15.33	-5.21
45656681	Flagellar Filament Sheath Protein	315	4.67	10.67	-5.23
45657107	Hypothetical Protein LIC11224	383	5.33	10.33	-5.27

45658675	50S Ribosomal Protein L17	171	2.33	7.00	-5.29
45657237	Hypothetical Protein LIC11359	392	5.00	19.67	-5.35
45656770	Putative Lipoprotein	159	2.00	11.33	-5.35
45658750	Methyl-Accepting Chemotaxis Protein	692	8.33	8.00	-5.40
45657789	Short-Chain Dehydrogenase	258	3.00	12.67	-5.47
45656005	Long-Chain-Fatty-Acid CoA Ligase	685	7.67	9.33	-5.47
45656680	Flagellar Filament Sheath Protein	239	3.33	12.33	-5.49
	Fused Transcript Cleavage				
45656682	Factor/Uncharacterized Domain-Containing Protein	926	10.00	9.00	-5.52
161621774	Malate Dehydrogenase	326	3.67	13.33	-5.53
45656741	30S Ribosomal Protein S2	294	3.00	12.33	-5.56
45655941	Hypothetical Protein LIC10027	234	2.33	11.67	-5.60
45657884	Catalase	481	4.67	5.00	-5.65
45657989	UDP-Glucose 4- Epimerase	344	3.33	11.67	-5.66

45655825	Peptidoglycan- Associated Cytoplasmic Membrane Protein	383	3.33	4.67	-5.73
45657502	Long-Chain-Fatty-Acid CoA Ligase	681	6.00	8.33	-5.73
45659135	ABC Transporter, ATP- Binding Protein	309	2.67	9.33	-5.74
45655754	Lipoprotein	717	6.00	7.67	-5.78
45655683	Hypothetical Protein LIC20100	283	2.33	10.67	-5.79
45655916	DNA Polymerase III Beta Subunit	373	3.00	6.67	-5.80
45658291	30S Ribosomal Protein S1	560	4.67	7.33	-5.80
45656113	Cytochrome C Oxidase Polypeptide II	333	2.67	6.00	-5.82
45659166	DNA Gyrase Subunit A	462	4.00	6.67	-5.82
45659137	Fatty Acid Synthase Subunit Beta	385	3.00	6.33	-5.87
45659304	Metallopeptidase	482	3.67	3.67	-5.92
45655785	Hypothetical Protein LIC20205	289	2.33	7.67	-5.95
45656816	Putative Lipoprotein	497	3.67	8.33	-5.95
45657082	Adenylate/Guanylate Cyclase	423	3.33	7.33	-5.96

45656648	DNA-Directed RNA Polymerase Subunit Beta'	1404	9.67	8.00	-5.97
45658872	UDP Glucosamine N- Acyltransferase	340	2.33	6.00	-5.97
45657515	LipL45	390	2.67	9.00	-5.98
45657618	Glycosyl transferase	436	3.00	10.00	-5.99
45659147	Isocitrate Dehydrogenase	488	3.33	9.00	-6.01
45659186	Sulfite Reductase Subunit Beta	561	3.67	9.67	-6.01
45658099	Carboxy-Terminal Processing Protease	590	3.67	5.00	-6.06
45656121	Phosphoenolpyruvate Carboxykinase	530	3.33	8.00	-6.09
45658836	Acyl-CoA Dehydrogenase	557	3.33	6.33	-6.10
45658643	Serine Protease MucD Precursor	388	2.33	4.33	-6.11
45657126	F0F1 ATP Synthase Subunit Beta	467	2.67	5.67	-6.16
45657659	Endopeptidase IV	328	2.00	5.00	-6.17
45656158	Alcohol Dehydrogenase	417	2.33	3.33	-6.18
45657396	Chemotaxis Protein	976	5.33	4.67	-6.19
45657156	Hypothetical Protein LIC11274	369	2.00	3.33	-6.19
45658540	Translation Initiation Factor IF-2	891	5.00	6.33	-6.19

45658753	Citrate Synthase	426	2.33	3.00	-6.20
45659119	3-Hydroxyacyl-CoA Dehydrogenase	436	2.67	3.00	-6.22
45658404	Glycerol-3-Phosphate Dehydrogenase	669	3.67	6.00	-6.25
45656296	Acetyl-CoA Acetyltransferase	393	2.00	5.67	-6.25
45658848	Hypothetical Protein LIC13021	857	4.33	4.33	-6.29
45656194	H+-Translocating Transhydrogenase Subunit Beta	466	2.33	5.67	-6.29
45659210	Ketol-Acid Reductoisomerase	374	2.00	4.67	-6.30
45656647	DNA-Directed RNA Polymerase Subunit Beta	1226	6.00	4.33	-6.33
45657665	Glycerol Kinase	496	2.33	8.33	-6.35
45656266	Isovaleryl-CoA Dehydrogenase	394	2.00	8.33	-6.35
45658578	NADH Dehydrogenase I D Subunit	405	2.00	5.33	-6.38
45657297	Phosphate Sodium Symporter	763	3.33	4.67	-6.42
45656847	Monooxygenase	468	2.00	3.33	-6.43
45658659	Citrate Synthase	429	2.00	7.67	-6.44
45655824	Aconitate Hydratase	757	3.33	5.33	-6.47
45656176	Elongation Factor G	706	3.00	3.67	-6.47

45658253	Putative Glutamine Synthetase Protein	473	2.00	4.67	-6.54
45659167	DNA Gyrase Subunit B	711	2.67	4.67	-6.58
45657542	Alkylglycerone-Phosphate Synthase	563	2.00	3.00	-6.61
45657575	Histidine Kinase Response Regulator Hybrid Protein	832	3.00	5.33	-6.64
45656787	TonB-Dependent Outer Membrane Receptor	885	3.00	3.00	-6.66
45657390	Acetyl-CoA Carboxylase Alpha Subunit	555	2.00	4.33	-6.70
45657855	Succinate Dehydrogenase Flavoprotein Subunit	637	2.00	2.67	-6.74
45655920	DNA Gyrase Subunit A	834	2.00	2.33	-7.10
Total Conserved Proteins			111		



**Vaccine B**

<b>Accession Number</b>	<b>Protein identification</b>	<b>Protein Length (Amino Acids)</b>	<b>Mean No. of peptides</b>	<b>Mean % Coverage</b>	<b>Mean ln(NSAF)</b>
45657214	Co-Chaperonin GroES	96	4.33	19.00	-0.85
45657753	Flagellin Protein	281	2.33	5.00	-2.44
45657213	Chaperonin GroEL	546	4.67	5.67	-2.61
45657230	LipL32	272	2.00	6.00	-2.64
Total Conserved Proteins			4		

**Vaccine C**

<b>Accession Number</b>	<b>Protein identification</b>	<b>Protein Length (Amino Acids)</b>	<b>Mean No. of peptides</b>	<b>Mean % Coverage</b>	<b>Mean ln(NSAF)</b>
45658793	LipL41	355	13.00	30.67	-2.09
45656175	Cell Wall Hydrolase	221	6.33	3.00	-2.36
45657230	LipL32	272	6.67	26.67	-2.48
45657753	Flagellin Protein	281	4.00	17.00	-3.01
45657748	Putative Lipoprotein	412	6.33	17.00	-3.02
45656311	Hypothetical Protein LIC10411	157	2.00	15.00	-3.13
45656504	DNA-Binding Stress Protein	172	2.00	13.00	-3.22
45657533	Deoxyguanosinetriphos phate Triphosphohydrolase	381	4.33	1.00	-3.27
45656611	Putative Lipoprotein	440	4.67	12.67	-3.33
45657078	Putative Citrate Lyase	330	3.33	14.67	-3.41
45657213	Chaperonin GroEL	546	4.33	8.33	-3.60
45657930	Cysteine Synthase	309	2.00	7.33	-3.80
45659065	Isocitrate Dehydrogenase	398	2.33	5.00	-3.92
45656396	Putative Lipoprotein	955	5.00	1.00	-4.01
45656890	LipL71	555	3.00	3.67	-4.02
45658886	LipL36	366	2.00	7.00	-4.07
45658996	KtrB	599	2.33	0.00	-4.33
Total Conserved Proteins			17		

**Vaccine D**

Accession Number	Protein identification	Protein Length (Amino Acids)	Mean No. of peptides	Mean % Coverage	Mean ln(NSAF)
45658793	LipL41	355	11.00	30.67	-2.08
45657230	LipL32	272	7.33	24.33	-2.22
45657753	Flagellin Protein	281	6.67	26.00	-2.35
45656175	Cell Wall Hydrolase	221	5.33	3.00	-2.38
45656311	Hypothetical Protein LIC10411	157	2.00	15.00	-2.96
45657043	Dihydrolipoamide Dehydrogenase	490	5.33	2.00	-3.12
45656096	Peptidoglycan Associated Cytoplasmic Membrane Protein	195	2.00	16.00	-3.17
45658988	Hypothetical Protein LIC13166	306	3.00	8.33	-3.22
45656272	Putative Lipoprotein	480	3.67	9.33	-3.57
45656890	LipL71	555	3.33	6.00	-3.78
45656396	Putative Lipoprotein	955	4.33	1.00	-4.03
Total Conserved Proteins			11		

**Vaccine E**

Accession Number	Protein identification	Protein Length (Amino Acids)	Mean No. of peptides	Mean % Coverage	Mean ln(NSAF)
45658793	LipL41	355	10.00	26.67	-2.39
45657753	Flagellin Protein	281	6.33	21.00	-2.59
45657230	LipL32	272	5.00	19.00	-2.88
45658705	Elongation Factor Tu	401	6.33	20.00	-3.00
45656175	Cell Wall Hydrolase	221	3.33	3.00	-3.00
45656096	Peptidoglycan Associated Cytoplasmic Membrane Protein	195	3.00	16.00	-3.01
45656311	Hypothetical Protein LIC10411	157	2.33	15.33	-3.03
45657822	Hypothetical Protein LIC11966	125	2.00	16.67	-3.03
45657711	Hypothetical Protein LIC11848	276	3.33	9.67	-3.42
45658988	Hypothetical Protein LIC13166	306	2.33	7.33	-3.83
45658886	LipL36	366	2.33	6.00	-3.87
45657748	Putative Lipoprotein	412	2.33	5.00	-3.99
45658750	Methyl-Accepting Chemotaxis Protein	692	3.00	4.00	-4.41
Total Conserved Proteins			13		